DOCUMENT RESUME

ED 244 311 CS 504 602

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TITLE Supervisor Accessibility and Job Characteristics.
PUB DATE May 84
NOTE 20p.; Paper presented at the Annual Meeting of the International Communication Association (34th, San Francisco, CA, May 24-28, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Communication Research; *Employee Attitudes; *Employer Employee Relationship; *Interpersonal Communication; *Job Satisfaction; Managerial Occupations; Organizational Climate; *Organizational Communication; Work Attitudes; Work Environment

ABSTRACT

A study examined the relationship between dyadic and normative accessibility of work supervisors and task characteristics of autonomy, variety, and identity (whether the task is part of a process or results in a finished product). Dyadic accessibility refers to workers' estimates of their supervisors' accessibility. Normative accessibility is the workers' estimate of supervisor accessibility norms in the organization as a whole. Forty middle-level management personnel in various midwestern organizations completed a questionnaire and were interviewed by organizational communication students. Analysis of the results indicated that task characteristics are related differentially to dyadic and normative supervisor accessibility. The data showed support for the overall relationship between task characteristics and dyadic accessibility. Variety was significantly related to access in that workers felt they have more opportunity to interact with their supervisors when their job requires many activities. The relationship of autonomy and identity to accessibility was not as clear cut. Autonomy produced significant results, indicating that employees need to have a relationship in which their supervisors are accessible, even though they may not often take advantage of it. Task identity failed to produce a significant correlation. The results failed to indicate a relationship between task characteristics and normative accessibility. (HTH)

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SUPERVISOR ACCESSIBILITY AND JOB CHARACTERISTICS

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ABSTRACT

Dyadic and normative accessibility are hypothesized to correlate positively with three task dimensions: variety, autonomy and identity. The presumed independence of the dyadic and normative accessibility scales is also investigated. Data were collected from 40 middle level managers is a variety of organizations. Results show significant relationships between dyadic accessiblity and the characteristics of variety and autonomy. Tasks with high identity plausibly do not require much supervision. Follert's scale for normative accessibility seems to have some serious validity problems, and probably ought to be replaced or newly validated.

SUPERVISOR ACCESSIBILITY AND JOB CHARACTERISTICS

Perhaps the most common perceptual measure of the quality of life in an organization is satisfaction - with one's job, with one's supervisor or with one's organization as a whole. As a result of its usefulness as a dependent measure in organizational research, satisfaction is proving to be a theoretical link between dozens of other variables. This paper brings together two previously disparate traditions - Follert's supervisor accessibility studies and the large literature on job characteristics - which each help explain various worker satisfactions.

Supervisor accessibility has been directly linked to satisfaction with one's superior, such that accessible supervisors are more satisfying (Follert, in pressa). Furthermore, accessibility has proved to be an important element of organizational climate (Follert, 1983), which of course is important to communication satisfaction (Falcione, 1974) and organizational satisfaction in general (see, e.g., Likert, 1967; Redding, 1972). Another indirect link to overall satisfaction may be inferred from the finding that high access to one's superior sharpens one's role clarity (Follert, 1980b, in press(b)). Access also predicts attraction to, and homophily with, one's supervisor (Dallinger, 1983). Baird (1973) reports a consonant finding: subordinates' job satisfaction is positively correlated with their superiors' openness on task topics. (Jablin, 1979, says that most superior-subordinate communication is task oriented). So access seems to be an important influence on several kinds of worker satisfactions.

Job characteristics are also related to satisfaction. The three task features pertinent to this study are worker autonomy, task variety, and task

identity (i.e., does the task result in a completed product or a partial one?). Aldag and Brief (1975) report positive correlations ranging from .20 to .50 between these three job characteristics and satisfaction with supervisor and satisfaction in general. Walsh, Taber and Beehr (1980) report correlations of about the same size between job satisfaction and autonomy, variety and identity. Schriesheim and DeNisi (1981) also discovered a positive relation between variety and leadership satisfaction. These findings are only a small sample of the literature on variety, autonomy and identity (see Roberts and Glick, 1981), for a critical review of about 150 pertinent studies), but they should serve to illustrate the unsuprising claim that features of one's job predict one's satisfaction with it.

This is the first effort to link Follert's work on access to the literature on job characteristics. Some research has explored the relationship between variety, identity and autonomy and feedback (e.g., Schriesheim and De Nisi, 1981; Walsh, et. al., 1980; the correlations tend to be positive), but feedback and access are conceptually distinct. Supervisor accessibility refers to the possibility of communication, not to the fact of it. It is for this reason that Follert (1980) insists that access may be valuable even if the supervisor and subordinate rarely interact. A good level of accessibility requires that the superior be available whenever necessary; different jobs and workers will naturally require different levels of supervision. So research which deals only with the frequency of superior-subordinate communication is not entirely on point.

The precise goal of this study is to relate Follert's two measures of access to the three job characteristics mentioned earlier. Their common positive relations to various satisfactions is weak evidence that they will themselves be positively correlated. Hence our first hypothesis: dyadic

and normative accessibility are positively related to task variety, identity and autonomy. Dyadic accessibility refers to the subordinate's estimate of his/her supervisor's accessibility. Normative accessibility, on the other hand, is measured by asking the subordinate to rate the access norms of the organization as a whole.

Tasks with high variety would seem to require high levels of access, simply because there is more supervision to do. In highly variable jobs, more things can presumably go wrong in a greater number of ways. A supervisor with two subordinates - one with a repetitive unchanging job, and the other with a job whose specific demands change from day to day - would naturally need to be more open to the second worker.

A job having a high level of task identity is one in which the worker makes a finished product rather than a component. Identity is therefore highly correlated with task feedback (Walsh, et. al., 1980), which is the feedback arising from the task itself. Workers with such jobs should require the least supervision, and so we expect only a weak relationship between access and identity. The data should still produce a positive correlation, however, because both access and identity are positively related to satisfaction.

Highly autonomous jobs do not require frequent supervisor-worker interaction. But as noted above, frequency and access are distinct. The autonomous worker also needs easy access. If interactions are in fact rare, the interpersonal relationship between superior and subordinate must still be a good one in order to provide unencumbered access. Effective work relations therefore require that the supervisor make clear that his/her door is open, even if its threshhold is rarely crossed. So autonomy and access are expected to have a clearly positive relationship.

A secondary purpose of this paper is to examine critically the distinctness

of dyadic and normative accessibility. Certainly they are conceptually different: one measures access in a single, concrete work relationship (Follert, 1980b originally called this idiosyncratic accessibility), while the other refers to the overall organization's rules for access. However, a close reading of the literature leads to suspicions about discriminant validity. For one thing, the scales correlate at significant levels (r=.60 in Follert, 1980a; r=.77 in Follert, 1980b; r=.69 in Dallinger, 1983). In the context of this literature's results, there are very high correlations indeed. A possible reason for this lack of empirical discrimination emerges from the measuring procedure for normative accessibility: subordinates are asked to make estimates about supervisor accessibility throughout the organization. Plausibly, these ratings will be dominated by the rater's only concrete experience in the organization - experience with the same supervisor rated on the dyadic accessibility scale (versions of the scales are in Follert, 1980a; 1982). We express our suspicions in the second hypothesis: dyadic and normative supervisor accessibility are strongly related. We will present data on the scales themselves, and closely examine their relationships to the job characteristics. A finding that the scales overlap to an unacceptable degree will justify only a different measurement approach; we are entirely satisfied that the two constructs are conceptually distinct.

METHOD

Respondents

Respondents were 40 middle level management personnel employed in various organizations in the midwest. Students in organizational communication classes were required to do an interview with an organizational member who held a job similar to one which the student hoped to hold from one to five years after

graduation. All students were Public Communication and Human Relations majors. Most interviewees were supervisors of 2-10 employees in small business organizations. Average interviewee's tenure in their respective organizations was 10 years, while the average length of time that they had worked for their present supervisor was 4 years.

Procedures

Subjects were asked, by the student interviewers, to complete a questionnaire following the interview and then return it directly to the first author. Forty of forty-seven interviewees returned the questionnaire, producing an 85% response rate. All questionnaires returned were used in the analyses.

Operationalization of the Measures

Supervisor Accessibility. The dyadic and normative dimensions of the supervisor accessibility scale were used to measure supervisor's availibility to their subordinates (Follert, 1980a). For each scale, seven Likert-type items were used ranging from strongly agree to strongly disagree. Previous alpha reliabilities and construct validity for various versions of the instrument are resported in Follert (1982) and Dallinger (1983) and are of acceptable levels.

Task Characteristics. The variety, task identity and autonomy subscales of the Job Characteristics Inventory (JCI) were used to assess properties of respondents' jobs (Sims, Szilagyi, and Keller, 1978). Each item was measured on a five point Likert-type scale. Alpha reliabilities and factor structure of the JCI have been reported in previous research (Sims, et. al., 1978; Griffin, Moorhead, and Johnson, 1980; Pierce and Dunham, 1978), and are of acceptable levels.

Analyses

Hypothesis 1 was tested by computing two multiple regressions. Dyadic supervisor accessibility was the independent variable in the first regression and normative accessibility was the independent variable for the second. For both regressions, the task characteristics constituted the dependent variables. Significant multiple correlation coefficients were considered to be support for the hypothesis. Further analyses were conducted by examination of the bivariate correlation between the variables.

Hypothesis 2 was tested by two separate procedures. First the bivariate correlation between dyadic and normative accessibility was examined. A significant correlation was counted as support for the hypothesis. Secondly, partial correlations were computed using each task dimension as a criterion. When dyadic accessibility was used as the independent variable then normative accessibility was used as the control variable, and vice versa. Significant partial correlations between task characteristics and both dyadic and normative accessibility were taken as evidence for Hypothesis 2.

RESULTS

Preliminary Analyses

Means, standard deviations and sample sizes can be located in Table 1.

Other analyses included principle components, orthogonal rotation factor analyses for the supervisor accessibility and the JCI instruments. The seven

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Insert Table 1
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item a priori structures for the dyadic and normative supervisor accessibility scales were generally supported, though we will discuss this in more detail under Hypothesis 2. Four item solutions were indicated for each of the variety,

task identity and autonomy scales, and therefore, subsequent analyses used these four item versions of the dimensions rather than the original scales. Factor loadings can be obtained by contacting the authors.

Coefficent alpha reliabilities were computed for each of the five subscales, and are presented in Table 1. These ranged from .76 to .91 and were deemed suitable for research use.

Finally, a correlation matrix was computed to determine the inter-relatedness between the variables. Approximately 50% of the correlations were significant at the bivariate level. These correlations are in Table 2.

Hypothesis 1 The multiple regression using dyadic accessibility as the dependent variable was significant ($F=4.08$, $p=.05$). The task characteristics of variety, autonomy and identity produced an R of .33 when regressed on dyadic supervisor accessibility, and accounted for 11% of its variance. However, the regression using normative accessibility as the dependent variable failed to reach significance ($F=.84$, $p=.37$). Task variety, autonomy and identity produced an R of .16, and accounted for only 2% of the variance in normative accessibility. Regression statistics are included in Table 3.

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Insert Table 2
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Examination of the correlation matrix indicated that both variety and autonomy were significantly correlated at the bivariate level with dyadic accessibility. However, the dyadic accessibility/task identity correlation did not reach significance. None of the three task characteristics were significantly correlated with normative accessibility at the bivariate level. The power for a correlational test of medium effect size and $\alpha = .05$ with the present sample size in .60 (Cohen, 1969). Considered together, these anlayses provide partial support for hypothesis 1: dyadic accessibility is related

to task variety and autonomy, but no other relationships are significant.

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Insert Table 3
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Hypothesis 2. The bivariate correlation between normative and dyadic supervisor accessibility was .67 and was significant (p=.001), thus tending to support the hypothesis. The partial correlations using dyadic accessibility as the independent variable and normative accessibility as the control variable produced significant bivariate correlations both for variety (r=.34, p=.02) and for identity (r=.29, p=.05) but not for autonomy (r=.15, p=.20). The partial correlations between the task characteristics and normative accessibility, controlling for dyadic accessibility, failed to produce any significant correlation coefficients (variety: r= -.15, p=.20; autonomy: r=.02, p=.46; and identity: r= -.17, p=.17). Partial correlations are included in Table 4.

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Insert Table 4
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Although the factor loadings for dyadic and normative accessibility conformed reasonably well to the a priori factor structure, they did not indicate two entirely distinct dimensions. Several items loaded nearly as much on the second dimension as on the first. Taken together these analyses indicate that using one access measure as a control variable can have important effects on the various relationships; this is a result of the overlap implied by the correlation between the two measures.

DISCUSSION

Task characteristics are differentially related to dyadic and normative supervisor accessibility. The data showed support for the overall relationship between task characteristics and dyadic accessibility. Variety was significantly

related to access in both the bivariate and the partial correlations. As hypothesized, subordinates feel that they have more opportunity to interact with their supervisors when their job requires many activities. The relationship of autonomy and identity to accessibility was not quite as clear-cut. In the bivariate correlations, autonomy produced significant results, indicating that employees need to have a relationship in which their superior is accessible (even though they may not often take advantage of it). Identity failed to produce a significant correlation, although it was in the positive direction. When workers have high identity jobs, they may gain most of their feedback from completion of the task, rather than by communicating with the supervisor. Thus, they are not as likely to need access to the supervisor. These findings are consistent with the hypothesis, even though identity did not produce the significant relationship expected.

The partial correlations between autonomy and identity were not consistent with the bivariate results. Here identity was significantly correlated with accessibility, and autonomy was not. While we could work out several meaningful explanations for these results, we hesitate to do so because of our dissatisfaction with the normative dimension of the accessibility instrument. If the normative instrument is not measuring a distinct concept, then partialling out normative accessibility from dyadic may reduce true score variance in the dyadic measurement. When the variance is small, correlations are not as likely to occur and we feel that the partialed correlations here are an example of this effect. Thus, we believe that the data indicate a relationship between dyadic access and these three task characteristics, in spite of the partial correlation results.

The results fail to indicate a relationship between task characteristics and normative supervisor accessibility. The overall multiple regression was

not significant and neither the bivariate nor the partial correlational analyses produced a single significant result. This finding, though inconsistent with our hypothesis, is perhaps not very suprising. Subordinates are extremely familiar with their own jobs and with their relationships with their own supervisors. Thus they are able to make valid reports of their perceptions on the dyadic scale. But subordinates may not have extensive knowledge about the entire organization and the norms existing in it. Therefore, a given subordinate's perception of the organizational norms may not be very accurate. Thus the data about normative accessibility may contain too much error variance to allow relationships to emerge.

A second explanation for the lack of significant results is the nature of the normative measuring instrument. As previously suggested, the normative instrument here may simply be an indirect measure of dyadic accessibility because the subordinate can only generalize about norms of accessibility based on direct experience with his/her own superior. If this instrument is really measuring that relationship, then it loses validity in regard to organizational norms as a whole. Of course, if an instrument has poor validity, it probably cannot be used to isolate relationships even if they do in fact exist. The results of the bivariate correlations show the same general pattern of results for the normative/accessibility correlations as they do for the dyadic/accessibility correlations (though of course the normative correlations are lower). This would be expected if the two instruments were measuring the same thing, but the first were a better (more valid) measure of it. Thus we believe that we have not really tested the relationship between normative accessibility and task characteristics because of the poor quality of the normative instrument used.

If the Follert operationalization of normative accessibility is not

valid, how can one measure this construct in organizations? We suggest several alternatives. First, an organization may have some formal statements of accessibility norms which could be obtained. Policies concerning performance appraisals might constitute accessibility norms. An organization which requires superiors to consult with each of their subordinates four to six times a year should have greater accessibility norms than one which requires such interaction only once a year or less. Other organizational procedures which are being implemented with growing frequency, (e.g., feedback meetings, management by objectives, team development programs) can affect or implement organizational accessibility norms. Such an operationalization would have to be undertaken with caution. Just as the organizational chart is not always an accurate picture of the communication network, these formal policies may not accurately reflect actual norms of accessibility.

Sceondly, normative accessibility could be measured by asking all employees of an organization to complete Follert's dyadic scale. An average of these perceptions should provide an assessment of normative accessibility from the subordinates' point of view.

Similarly, the superiors in an organization might be asked to respond to an instrument asking either how accessible to subordinates they are or how accessible they are supposed to be. An average of these responses would represent the supervisors' view of the accessibility norm.

Finally, norms for accessibility could be obtained through observational techniques. Trained observers watching interactions between superiors and subordinates could detect overall accessibility norms. Such procedures could be used to validate dyadic accessibility reports for particular superior/subordinate dyads. An advantage of using observational techniques is that actual behaviors are used rather than reliance on self reports and recall.

Although this would not be sufficient to assess the accessibility concept (because opportunity to interact is not quite the same as actual interaction, as we have noted), it can provide a good indication of how often subordinates and superiors do interact, and how often subordinates attempt to interact with superiors but fail to gain entre. Careful observations of these behaviors can provide useful information regarding accessibility norms.

CONCLUSION

Dyadic accessibility correlates positively with job characteristics. Both task variety and autonomy are significantly related to this measure of accessibility; the failure of identity to correlate is somewhat consistent with this paper's rationale. The measure of normative accessibility fails to correlate with job characteristics, but the normative measure itself seems to be flawed. Alternative ways of assessing organizational accessibility norms promise more validity.

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Table 1

Means, Standard Deviations, N Sizes and Alpha Reliabilities

	Mean	Standard Deviation	Sample Size	Reliability Coefficient
Dyadic Accessibility	29.64	5.52	39	.91
Normative Accessibility	28.71	4.87	38	.85
TASK CHARACTERISTICS				
Variety	16.33	2.83	40	.77
Autonomy	17.73	2.24	40	.76
Identity	17.57	2.35	37	.85

Table 2

Correlation Matrix

	Normative	Variety	Autonomy	Identity
Dyadic Accessibility	.67**	.32*	.37**	.18
Normative Accessibility		.14	.17	.04
TASK CHARACTERISTICS				
Variety			.28*	.13
Autonomy				.25+

** $p < .01$
* $p < .05$
+ $p < .10$

Table 3

Multiple Regression

Dependent Variable	R	R^2	F	p
Dyadic Accessibility	.33	.11	4.08	.05
Normative Accessibility	.16	.02	.84	.37

Table 4

Partial Correlation Matrix

	TASK CHARACTERISTICS		
	Variety	Autonomy	Identity
Dyadic Accessibility (controlling for normative)	.34*	.15	.29*
Normative Accessibility (controlling for dyadic)	-.15	.02	-.17

* $p < .05$